

### **REMARKS**

This document responds to a Decision on Appeal by the Board of Patent Appeals and Interferences, Appeal No. 2009-006479, issued on 01/11/2011 (hereinafter "Decision"). This amendment is submitted to reopen prosecution in accordance with the terms of the Decision and 37 C.F.R. § 41.50 (b)(1).

Claims 20, 22-32, and 34-40 were on appeal. Claims 1-19 were previously canceled. The Board reversed the pending rejections under sections 102(e) and 103(a) of the Patent Act. (Decision, page 12). The Board entered a new ground of rejection for all these claims under section 101 because the claims were allegedly directed to non-statutory subject matter. (Decision, page 6-12).

The applicants respectfully request reconsideration in light of the amendments and the following comments.

Claims 20, 26, 31, 36, and 37 are currently amended without prejudice, and the applicants respectfully reserve the right to re-present any or all of these claims in this or another application with or without the amendments.

Claims 41-49 are newly added.

#### **35 U.S.C. § 101 Rejection of Claims 20, 22-32, and 34-40**

Claims 20, 22-32, and 34-40 were rejected under 35 U.S.C. § 101 for allegedly being directed to non-statutory subject matter.

The applicants respectfully submit that the amended claims overcome the rejection.

**Claims 20 and 22-30.** Claim 20 as amended recites:

**20.** A method comprising:

receiving, at a data processing system, a requirement from a prospective purchaser for a first chemical, wherein **the requirement is based on a uniform standard for said first chemical;**

**comparing, by a computer in said data processing system, said requirement to analyses of batches** of said **first chemical that are available for purchase from at least two different suppliers through said data processing system** to identify a batch that satisfies said requirement, wherein said analyses are obtained from a testing facility that tests samples of said batches in accordance with said **uniform standard** for said first chemical, and further wherein each batch that is available for purchase is analyzed by said testing facility; and

outputting, from said data processing system, an indicium of said identified batch to said prospective purchaser;

**wherein said data processing system comprises said computer, and further comprises a data storage device that stores said uniform standard for the first chemical and said analyses.**

(emphasis added)

The applicants respectfully submit that, as amended, the method of claim 20 is a concrete application of computer technology to a marketplace for specialty chemicals. The method is transformative, because it takes disparate entities and brings them together, according to a uniform standard for a given chemical, via an electronic marketplace for the given chemical – which marketplace is based in a data processing system and its component parts. Accordingly, amended claim 20 recites several salient limitations that overcome the section 101 rejection:

- a requirement for a chemical based on a uniform standard which is received by a data processing system;
- a computer that compares the requirement to other data (*i.e.*, analyses received from a testing facility);
- the chemical is available for purchase through the data processing system;
- wherein said data processing system comprises said computer, and further comprises a data storage device that stores said uniform standard for the first chemical and said analyses.

"[I]nventions with specific applications or improvements to technologies in the marketplace are not likely to be so abstract that they override the statutory language and framework of the Patent Act." Research Corp. Techs., Inc. v. Microsoft Corp., No. 2010-1037, slip op. at 15 (CAFC Dec. 8, 2010) (reversing a determination of section 101 ineligibility for certain method claims); (see also Decision, page 8). In reversing the ineligibility determination of the lower court, the CAFC reasoned that the patentee's "invention presents functional and palpable applications in the field of computer technology." Research Corp. Techs., slip op. at 15.

Amended claim 20 is a concrete application of computer technology to a marketplace for chemicals. The method is transformative, because it takes disparate entities and brings them together so that they can operate through an electronic marketplace for the given chemical – the marketplace being implemented in the data processing system and its component parts. The method recites a specific data-processing-based application that is not abstract and is "a functional and palpable application[] in the field of computer technology," and therefore complies with the Patent Act.

When considered as a whole, claim 20 enables a marketplace for the sale of chemicals according to uniform standards; consequently, to perform the necessary data processing of the relevant uniform standard(s) as against purchasers' requirements:

- (i) the marketplace is uniquely implemented on the recited data processing system – and not in some other venue, *e.g.*, an open air market, a filing cabinet, etc.; and
- (ii) therefore, the recited data processing system comprises the recited computer and a data storage device, which devices perform key limitations of the method.

Accordingly, the method of amended claim 20 does not merely solve a mathematical equation. (See Decision page 9 (citing In re Grams)). As noted, claim 20 enables an electronic marketplace for chemicals – a marketplace that is made possible by the use of uniform standards in testing, listing, and ordering of the subject chemicals – and that requires a data processing system and its components to operate.

The Decision provides indirect guidance to applicants to overcome the alleged "insufficient recitation of a machine." (Decision, page 10). The Decision cites various "specific components of the data processing system (FF8)" which were not recited in the

claims on appeal. (Decision, page 10). Accordingly, responsive to the Decision, the applicants have amended claim 20 to recite:

- comparing by a computer, and
- wherein said data processing system comprises said computer, and further comprises a data storage device that stores said uniform standard for the first chemical and said analyses.

The applicants submit that these amendments satisfy at least some of the factors weighing towards patent eligibility. See Interim Guidance for Determining Subject Matter Eligibility for Process Claims in View of Bilski v. Kappos (July 27, 2010), available at [http://www.uspto.gov/patents/law/exam/bilski\\_guidance\\_27jul2010.pdf](http://www.uspto.gov/patents/law/exam/bilski_guidance_27jul2010.pdf) (hereinafter "Guidance").

Thus, in accordance with Guidance at page 3, in amended claim 20:

- the recited machine(s) implements the claimed steps.
- the claim is more than a mere statement of a concept, because
  - the claim describes a particular solution to a problem to be solved.
  - the claim implements a concept in some tangible way.
  - the performance of the steps is observable and verifiable.

In sum, as currently amended, claim 20 does not "merely compare[] data values." (Decision, page 12). Rather, the method as amended implements a marketplace for chemicals rooted in the use of uniform standards that enable buyers and sellers to operate on an "apples to apples" basis via a data processing system and its component parts. (See Applicants' Specification, page 12, line 9).

For all these reasons, the applicants respectfully submit that amended claim 20 overcomes the rejection.

Because they depend from claim 20, claims 22-30 likewise overcome the rejection. Moreover, the recitation of other patentable features in these claims provides an added basis for patentability.

**Claims 31-36.** Claim 31 as amended recites:

**31.** A method comprising:

**offering to a prospective purchaser, by a data processing system,** a uniform standard for a chemical, said uniform standard being defined by a supplier-independent set of physical and chemical characteristics of said chemical;

receiving, at said data processing system, a requirement from the prospective purchaser for said chemical, wherein said requirement comprises an allowable range of values for at least some of said physical and chemical characteristics that define said uniform standard, and **wherein said chemical is available for purchase via said data processing system;** and

**comparing based on said uniform standard, by a computer** in said data processing system, said requirement to analyses of a plurality of batches of said chemical that are available for purchase through said data processing system, wherein each batch that is available for purchase is analyzed by said testing facility, and further wherein **said analyses are stored in said data storage device;**

**wherein said data processing system comprises said data storage device, said computer, a first network interface to said prospective purchaser, and a second network interface to said testing facility.**

(emphasis added)

For the same reasons given in support of amended claim 20, the applicants respectfully submit that amended claim 30 overcomes the rejection. Moreover, claim 30 further recites:

- comparing by a computer based on the uniform standard, and
- wherein said data processing system comprises said data storage device (that stores the analyses), said computer, a first network interface to said prospective purchaser, and a second network interface to said testing facility.

The applicants submit that these amendments to claim 30 further comply with the indirect guidance at page 10 of the Decision regarding a more detailed recitation of the components of the data processing system.

For all these reasons, the applicants respectfully submit that amended claim 31 overcomes the rejection.

Because they depend from claim 31, claims 32, and 34-36 likewise overcome the rejection. Moreover, the recitation of other patentable features in these claims provides an added basis for patentability.

**Claims 37-40.** Claim 37 as amended recites:

**37.** A method comprising:

receiving, at a data processing system, a requirement from a prospective purchaser for a first chemical, **wherein said requirement is based on a uniform standard for said first chemical, and further wherein said uniform standard is stored in a data storage device;**

**comparing, by a computer** in said data processing system, said requirement to analyses of batches of said first chemical that are available for purchase through said data processing system to identify a batch that satisfies said requirement, wherein said analyses are obtained from a testing facility that tests samples of said batches in accordance said uniform standard for said first chemical, and wherein each batch that is available for purchase is analyzed by said testing facility;

**wherein said data processing system comprises said data storage device, said computer, a first network interface to said prospective purchaser, and a second network interface for obtaining said analyses from said testing facility.**

(emphasis added)

For the same reasons given in support of amended claims 20 and 30, the applicants respectfully submit that amended claim 37 overcomes the rejection. Moreover, claim 37 also recites:

- wherein said requirement is based on said uniform standard, which is stored in a data storage device, and
- comparing by a computer, and
- wherein said data processing system comprises said data storage device, said computer, a first network interface to said prospective purchaser, and a second network interface to said testing facility.

The applicants submit that these amendments to claim 37 further comply with the indirect guidance at page 10 of the Decision regarding a more detailed recitation of the components of the data processing system.

For all these reasons, the applicants respectfully submit that amended claim 37 overcomes the rejection.

Because they depend from claim 37, claims 38-40 likewise overcome the rejection. Moreover, the recitation of other patentable features in these claims provides an added basis for patentability.

### **New Claims 41-49**

Claims 41-49 are newly added in view of the analysis and indirect guidance set forth in the Decision. The applicants respectfully submit that all newly added claims comply with 35 U.S.C. § 101.

#### **Claims 41-43.** Claim 41 recites:

**41.** A method comprising:

- receiving, by a data processing system, a uniform standard for a chemical;
- receiving, by the data processing system, analyses of batches of the chemical, wherein the analyses are based on testing according to the uniform standard;
- storing the uniform standard in a uniform standards database and the analyses in an inventory database, wherein a data storage device in the data processing system stores the databases;
- offering the batches of the chemical for sale by the data processing system, wherein the offering enables a prospective purchaser to submit a requirement for the chemical according to the uniform standard; and
- in response to receiving the requirement from the prospective purchaser, identifying by the data processing system based on the analyses stored in the inventory database a batch that satisfies the requirement.

The method of claim 41 is a patent-eligible application of computer technology. The method is a concrete application of computer technology to a marketplace for specialty chemicals. The method is transformative, because it takes disparate entities and brings them together, according to a uniform standard for a given chemical, via an electronic marketplace for the given chemical – which marketplace is based in a data processing system and its component parts, including hardware and software components.

For these reasons, and for the same reasons given in support of claims 20, 30, and 37, the applicants respectfully submit that claim 41 complies with section 101.

Because they depend from claim 41, claims 42-43 likewise comply with section 101. Moreover, the recitation of other patentable features in these claims provides an added basis for patentability.

**Claims 44-46.** Claim 44 recites:

**44.** A method comprising:

obtaining, by a data processing system, analyses of batches of a chemical, wherein the analyses are the results of testing according to a uniform standard for the chemical, and wherein the uniform standard is defined by a set of physical and chemical characteristics of the chemical;

storing the analyses in an inventory database in the data processing system;

offering the batches of the chemical for sale by the data processing system, wherein the offering is according to the characteristics defining the uniform standard;

receiving, by the data processing system, a requirement for the chemical from a prospective purchaser, wherein the requirement is based on at least one characteristic defining the uniform standard;

identifying, by a computer in the data processing system, based on the requirement and the analyses stored in the inventory database, a batch that satisfies the requirement; and

transmitting an indicium of the identified batch to the prospective purchaser.

For the same reasons given in support of claims 20, 30, 37, and 41, the applicants respectfully submit that claim 44 complies with section 101.

Because they depend from claim 44, claims 45-46 likewise comply with section 101. Moreover, the recitation of other patentable features in these claims provides an added basis for patentability.

**Claims 47-49.** Claim 47 recites:



**47. (New)** A data processing system comprising:

a data storage device for storing (i) a uniform standard for a chemical, the uniform standard being defined by a set of physical and chemical characteristics of the chemical, and (ii) an inventory database comprising analyses of batches of the chemical, wherein each analysis is the result of testing of a batch of the chemical according to the uniform standard for the chemical;

a network interface for communicating between the data processing system and at least one of a testing facility that performs the testing according to the uniform standard, a supplier of a batch of the chemical, a prospective purchaser, and a subscriber;

a computer for:

(i) offering for sale the batches of the chemical from the inventory database,

(ii) receiving requirements according to the uniform standard for the chemical, wherein the requirements are submitted by the prospective purchaser via the network interface, and

(iii) identifying, from the analyses of the chemical in the inventory database, a batch of the chemical that satisfied the requirement from the prospective purchaser.

For the same reasons given in support of claims 20, 30, 37, 41, and 44, the applicants respectfully submit that claim 44 complies with section 101.

Because they depend from claim 47, claims 48-49 likewise comply with section 101. Moreover, the recitation of other patentable features in these claims provides an added basis for patentability.

**No Waiver**

All of applicants' arguments are presented without prejudice and are believed to suffice to respond to the pending Decision. The applicants reserve the right to discuss other distinctions between the applied art and the claims, and to present further arguments, in a later response or on appeal as appropriate. Silence by the applicants in regards to any statements in the Office Action is not to be construed as acquiescence or agreement therewith.

**Request for Reconsideration Pursuant to 37 C.F.R. 1.111**

Having responded to each and every ground for objection and rejection in the last Office action, applicants respectfully request reconsideration of the instant application pursuant to 37 C.F.R. 1.111 and request that the Examiner allow all of the pending claims and pass the application to issue.

If there are remaining issues, the applicants respectfully request that Examiner telephone the applicants' attorney so that those issues can be resolved as quickly as possible.

Respectfully,  
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